

IN THE SPECIFICATION

Please replace the paragraph beginning on page 1, line 6, with the following replacement paragraph:

A1 --The present invention is related to the invention described in U.S. Patent Application Attorney Docket No. ~~Chekuri 2-4-4~~ Serial No. 09/628,378 entitled "Methods and Apparatus for Design, Adjustment or Operation of Wireless Networks Using Pre-Frequency-Assignment Optimization," filed concurrently herewith in the name of inventors C.S. Chekuri et al.--

Please replace the paragraph beginning on page 3, line 6, with the following replacement paragraph:

A2 --Current procedures for network design include design tools that model network performance based on the given network parameters using statistical or other mathematical propagation models. An example of such a design tool is the Planet tool from Mobile Systems International, <http://www.rmrdesign.com/msi>. These and other ~~convention~~ conventional network design tools calculate certain radio frequency (RF) link metrics, e.g., signal strength or signal-to-interference ratio, which are of significance for particular network performance attributes. The accuracy of these predictions mostly depends on the accuracy of the propagation models and the precision of modeling environmental elements such as terrain, clutter, etc.--

Please replace the paragraph beginning on page 10, line 15, with the following replacement paragraph:

A3 --After completion of the set of preliminary steps 108, the pre-frequency-assignment optimization steps 102 of Stage 1 can begin. In step 120, the probability of certain sectors being co-channel or adjacent-channel interferers is determined. The co-channel and adjacent channel interference for the configuration is then determined in step 122. The network is then optimized based on a specified objective function in step 124. The pre-frequency-assignment optimization of

A3  
Stage 1 assumes a certain probability of frequency channel assignments for each of a number of sectors of the wireless network, and then optimizes the network based on these assumptions, using a derivative-based optimization algorithm.--

---

Please replace the paragraph beginning on page 11, line 6, with the following replacement paragraph:

---

A4  
--The post-frequency-assignment optimization of Stage 3 is initiated after the completion of the frequency assignment step ~~146~~ 142. In step 160, the co-channel and adjacent channel interference associated with the particular frequency assignment are determined. The assignment of mesh points to base stations are then checked in step 162 based on a measure of carrier to interference plus noise (~~C/I+N~~) ( $C/(I+N)$ ). Finally, an optimized coverage and capacity are determined in step 164. Advantageously, the post-frequency-assignment optimization stage of the process can further improve the network design, since the frequency assignment and thus the interference sources are known. In addition, the designer at this point has a better understanding of the blocking characteristics of the network, which leads to better traffic load balancing.--

---

Please replace the paragraph beginning on page 19, line 21, with the following replacement paragraph:

---

A5  
--As previously noted in conjunction with the general optimization process of FIG. 3, once the frequency assignment of step ~~146~~ 142 has been completed, the interferers are known and the network can be further optimized in the post-frequency-assignment optimization stage. At this stage, it is possible to obtain a more accurate measure of the blocking and to optimize accordingly. The objective of this stage in the illustrative embodiment is to size the network cells such that the traffic capability of the base stations matches the traffic density function for the target blocking rate while also trying to maximize coverage.--

---